4.0 Lincoln County Action Plan

4.1 Objective

The objective of the Lincoln County Action Plan is to document the existing wildland fire conditions and make recommendations for mitigation. These conditions and recommendations will be organized around the FMP objectives of public education and prevention, infrastructure and fuel reductions needs and conditions found throughout Lincoln County. This documentation leads to a discussion of needs and the appropriate recommendations for mitigation, based upon county priorities.

4.2 Infrastructure Needs

- **4.3 Communications:** Improved radio communications is the top infrastructure priority, and all emergency response departments in Lincoln County share this need.
- **4.3a Conditions:** Currently, Lincoln County emergency response agencies communicate with a multitude of different types of radios, channels, frequencies, and repeater sites, thereby creating many frustrations with present day communication problems. During multi agency incidents resulting in "heavy traffic", much bleeding and overriding occurs which results in confusion, increased frustrations and ultimately an increase in the critical response time.

Although Lincoln County is relatively flat, with less than 1000 feet difference in elevation countywide, there remain many dead spots in remote areas of the county where efficient radio communication is sporadic at best. (Figure 3) Additional repeater sites are available to improve upon communication efficiency throughout the county; however, these sites are located in remote areas of Lincoln County. Some available repeater sites are located in and adjacent to Federal Wilderness Study Areas (WSA's) making access to these remote sites for construction and routine maintenance impossible.

Figure 4, a relief Map, shows the Slope Risk Model for Lincoln County. Steep slope cause fires to spread rapidly because of convection and radiant heat at the head of the fire, and the fact that the flames are closer to the fuels and fire spreads more rapidly. Fortunately, elevation change (Relief) in Lincoln County in comparison to other counties is minimal.

Figure 3 Radio Dead Spots

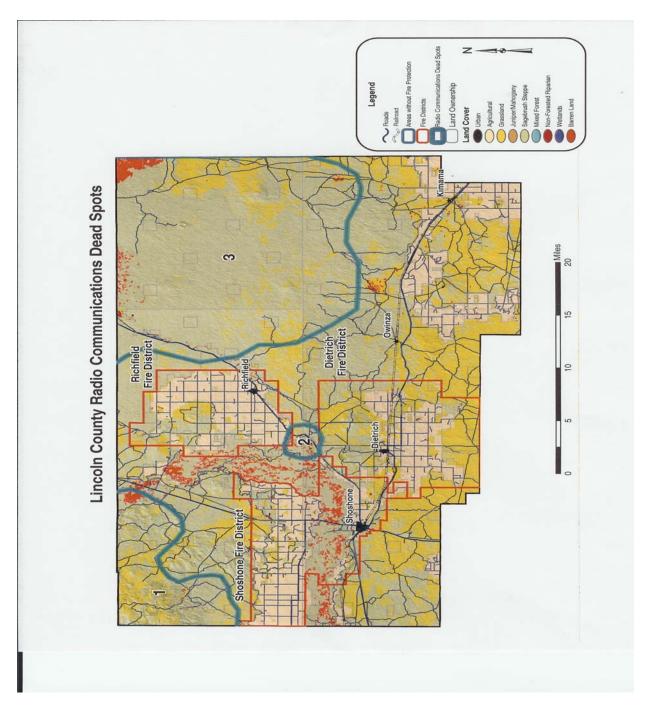


Figure 4, Slope



Higher mountains and available repeater sites, which would result in better radio coverage throughout Lincoln County, are available north of Lincoln County in neighboring Blaine County. Federal Agencies and Blaine County emergency response agencies share services on many repeater site locations. Federal radio coverage is much better than the existing situation in Lincoln County; however, federal agencies have problems with "deadspots" as well.

4.3b Recommendations:

Emergency response departments not only need to effectively communicate with each other, but neighboring counties as well, and this must be achieved without tying up Southern Idaho Radio Communications Center. (SIRCOM)

All federal agencies are switching over to P-25 digital radio systems by 2006. Planning is in place for Lincoln County to make the switch over to the P-25 digital system in 2012. Presently, Lincoln County emergency response departments operate on UHF and Federal Agencies operate on VHF; therefore, a bridging device to go from UHF to VHF would promote better communications with federal agencies and increased efficiency.

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Communication systems need to be upgraded to facilitate better communication between dispatcher, emergency, disaster, and fire personnel regardless of agencies involved. Computer systems as well as radio and phone systems need to be linked to facilitate voice and data transfer.

To eliminate the frustrations and strengthen the county's communication problem a number of viable alternatives are available for Lincoln County.

- 1. Approach the Federal Communications Center (FCC) to propose shared services. Shared services on the existing repeater sites on Bennett Mountain, Bell Mountain, and Kimama Butte would increase the effectiveness of radio communications throughout most of Lincoln County, and eliminate most of the "dead spots".
- 2. Once the communication coverage issue is resolved, the next issue is to increase communication effectiveness between emergency response agencies. This could be made possible with a "bridging device".

A bridging device would allow all emergency response agencies to talk to each other irregardless of what frequency they're operating on, what type of radios they have, or what repeater sites they currently operate from.

The bridging device would interconnect all systems together by providing a multi-agency use, or interconnected use channel, which would be compatible throughout Lincoln County. Currently, a bridging device costs around \$50,000.

- 3. Apply for a special use permit with FCC to allow Lincoln County to construct and maintain a solar powered repeater site. Such a site, in the Bennett Hills, accompanied by a bridging device, would resolve all communication problems in Lincoln County.
- 4. Start working towards a P-25 digital system. All federal agencies are going to narrow band, digital systems by 2006. The P-25 communication system is a digital, narrow band system equipped with a search bank and is "backwards" compatible, to transmit and receive on all frequencies. A P-25 system would be compatible with all federal agencies and resolve all Lincoln County's communication problems. Currently only one company (Motorolla) produces the P-25 communication system, therefore the system is quite expensive. Handheld, P-25 compatible radios cost around \$3500.00.

It is anticipated, with more communication companies offering P-25 systems in the near future (2006-2009), increased competition will force the price of P-25 compatible handheld radios down to a more reasonable price of \$400-\$600 each.

4.4 Available Water

- **4.4a Conditions:** All FPD's have excellent water available for refill sites during emergency incidents. There is good access to major canals, laterals and tributaries near farmable ground, and verbal agreements exist to access water from sprinkler lines, wells, and stock ponds during a normal fire season. A concern that is shared by all Lincoln County FPD's is when seasonal water sources (canals) are shut down for the year. This issue becomes increasingly more important during drought years and seasonal water sources are shut down early, and no longer available during the middle of the fire season.
- **4.4b Recommendations:** All Lincoln County FPD's have identified the need for "year around" water or refill sites. To reduce travel and refill time for suppression equipment, dedicated access to year around water sources through written agreement needs to be established with private landowners in remote areas of all three (3) FPD's.

Most emergency refill sites in remote areas are seasonal water sources only. If no opportunity exists with private landowners for a dedicated year around water source, then a number of 30,000 water storage tanks or cisterns should be constructed in remote areas of each FPD. (Figure 1)

Initiate a program in cooperation with private landowners to obtain written agreements for dedicated water or refill sites and allow access to irrigation wells and sprinkler lines. This would require proper fittings, which should be standard accessories on all tenders and engines. Dedicated water refill sites that are available year round would reduce travel and refill time for suppression equipment during emergency incidents.

4.5 Bridge Limits

4.5a Conditions: An assessment of bridge conditions, supported by the annual State Bridge and Road Inspection, found that three (3) bridges in their present condition do not support recommended tare weights or pass annual inspections. The Shoshone Highway District has two (2) bridges with substandard weight limits located on the Big Wood Lateral near Four Brothers Dairy, and another at Tunupa, where 440 West crosses the Little Wood River, in western Lincoln County. (Figure 5)

The Dietrich Highway District has one (1) bridge with substandard weight limits and will not pass annual inspection located on the Dietrich Canal lateral which is the only access to private land and a home occupied by Kelly Jennings at 94 South, 700 East. (Figure 5)

4.5b Recommendations: The Dietrich and Shoshone Fire Department protection maps have been updated, and volunteer firefighters made aware of the deficient bridge locations. Planning and the appropriate funding should be initiated to correct this situation in the near future. For cost estimates refer to the Budget Spreadsheet, Appendix D.

Lincoln County Fuels Reduction Needs/Bridges Dietrich Fire District Richfield Fire District Shoshone Fire District

Figure 5 Fuels Reduction Needs/Bridges

4.6 Structural Facilities

4.6a Conditions: Presently, the Dietrich Fire Department utilizes the old highway district building, which was constructed in 1944, as their fire station. (Figure 6) The building is in need of major upgrade just to comply with local ordinances and fire codes. The facility also needs additional space for storage of equipment and suppression engines, and the Dietrich QRU. It has no restrooms or changing room and most suppression equipment must be stored outside making it unavailable in inclement weather.

The Richfield Fire Department constructed a new fire station in 2002. (Figure 8) The new facility has adequate space to store all suppression equipment and the Richfield Quick Response Unit (QRU); however, the new station remains in need of major upgrade to construct a changing room, restroom, training room, and pour a cement floor. An interior, quick refill water system for two (2) storage bays would also be a great improvement.

The Shoshone City and Rural Fire Department has two (2) stations. Station One (Figure 10) was constructed in 1949. The facility affords the opportunity to house emergency equipment inside, out of inclement weather and ready for a response year around; however, the station is in need of a major upgrades including a changing room, additional storage space, ceiling insulation and new electrical wiring throughout the facility to comply with local ordinances and fire codes.

Shoshone Station Two (Figure 11) is located six (6) miles North and twelve (12) miles west of Shoshone. Constructed in 1946, station two (2) is nothing more than a long "single car garage". The station is not heated, has no restroom; no changing room; no office or training space, no storage space, and has a gravel floor. The facility has adequate space for three (3) types of emergency equipment, as noted above; however, the limited space requires each piece of equipment to be backed in and stored "end to end". What piece of equipment is stored in first out position depends up the greatest need, season and time of year.

Substantial growth in support of the "Woodriver Commute" has resulted in the subdivision of many acres of farm ground and the development of thirty-one (31) new subdivisions within Lincoln County over the past twelve (12) years. All three (3) of Lincoln County's major communities have experienced the increased growth of single-family dwellings in and around each community and the rural areas. Thirty one (31) of the thirty two (32) new subdivisions have been developed north and east of Shoshone, in Shoshone's Station Two's response area.

4.6b Recommendations: Two (2) new fire stations should be built in the Dietrich and Shoshone FPD's with adequate space for respective QRU's, and funding appropriated to provide upgrading current stations in Richfield and Shoshone FPD's.

Needed upgrades include: insulation and heating, storage and changing rooms, office space, inside rapid refill water system, restrooms and a cement floor.

To keep up with the demand for new home sites and requests for fire protection, a new station should be considered in the Shoshone FPD, north and east of Shoshone, where major new subdivisions are being developed. The new facility should also have adequate space to house the

North Shoshone QRU. The Shoshone City and Rural Fire Department has been offered the ground (1 acre), north and east of Shoshone, if a new facility could be constructed on the site, equipped with structural engines and appropriately trained volunteers. Cost estimates are included in the Budget Spreadsheet, Appendix D.

4.7 Equipment

- **4.7a Condition:** Emergency Infrastructure needs is common throughout all Lincoln County's emergency response agencies. To maintain peak efficiency and cost effectiveness, all emergency response equipment should be upgraded, or targeted for replacement when approaching ten (10) years old. Once suppression equipment exceeds ten (10) years old, replacement parts are no longer available from the factory.
- **4.7b Recommendation:** As reflected in (Table 10), there is a definite need to upgrade and/or replace numerous types of emergency equipment within all Lincoln County emergency response agencies.

Upgrade and replace old fire equipment as needed to meet expanding fire suppression needs. Additional or outstanding infrastructure needs include a 2000 gallon refill engine for the Richfield FPD and Shoshone's Station Two. Light and heavy brush trucks are needed for the Richfield and Shoshone FPD's.

Coordination and funding support should be initiated to upgrade and improve upon the inferior community emergency service infrastructure throughout Lincoln County.

Initiate a ten (10) year replacement/rotation schedule, with appropriate funding to upgrade emergency service infrastructure in Lincoln County.

A ten (10) year rotation schedule is the most widely accepted standard for replacing/upgrading older equipment with many hours or miles, and reduces routine maintenance costs.

Provide the appropriate grant writing and application training to enhance the opportunity for local emergency officials to successfully develop grant applications and obtain funding, which is available now. For estimated upgrade/replacement costs refer to budget spreadsheet. (Appendix D)

4.8 Training

4.8a Condition: Proper and efficient management of an all-volunteer firefighting organization, most often is a "work of art" in itself. The appropriate level of management requires a great amount of finesse and keen management skills just to keep an active, entry level volunteer in the program, develop and maintain their interest and skills to establish an upward mobility program and maintain an efficient training cadre.

Each of the three (3) Lincoln County FPD's desire to start the practice of paying for volunteer firefighters for time spent in the classroom to encourage upward mobility and continued education

Table 5. *Average/Current Training Levels of Lincoln County Fire Protection Districts Volunteers

| FPD | Number of Volunteers Active/Inactive | Average Level of Training | Average years of experience | Average Age |
|-----------|--|------------------------------|-----------------------------|-------------|
| Dietrich | 12/6 | Basic - 7 Advance - 5 | 12 | 37 |
| Richfield | 20/4 | Basic - 16 Advance - 6 | 9 | 40 |
| Shoshone | 26/7 | Basic – 19 Advance - 7 | 10 | 36 |

4.8b Recommendation: Continue and expand existing firefighter training program so that all fire personnel are qualified in both wildland and structural fire suppression techniques. Consideration should be made in paying volunteers for basic and advanced training. Additionally, this opportunity for cross training (structural/wildfire) should be made available to all emergency service first responders within Lincoln County.

Provide the appropriate funding to allow departments to implement the standard (recommended) ten (10) year training profile. (Appendix B) Each of the three (3) Lincoln County FPD's would like to provide the necessary advance fire training to bring one (1) or two (2) of the more active volunteers up to the level of "Taskforce Leader", which would be the equivalent of "Assistant Fire Chief". This would enable each PD to have qualified leadership in the event of multiple incidents and leadership in the fire chief's absence.

If Lincoln County continues to experience accelerated growth and new housing developments, consideration should be given for justification of creating a full time fire chief position for the Shoshone Fire Protection District. Also, to increase cooperation, facilitate, and coordinate, the suppression and training needs between FPD's and all other Lincoln County Emergency Response Agencies. Lincoln County is rapidly approaching the need for the creation of a full time Lincoln County Fire Marshall position.

4.9 Mutual Aid

4.9a Condition: Mutual aid agreements exist among the three (3) Fire Protection Districts and are updated annually. This allows for temporary equipment and personnel assignments to other districts on an as needed basis.

The Districts also have mutual aid agreements with the U.S. Fish and Wildlife Service, U.S. Park Service, U.S. Forest Service, and the Bureau of Land Management.

Presently, a great amount of concern exists between BLM and Lincoln County fire departments. Lincoln County fire departments feel that their department is not being utilized according to the Mutual Aid Agreement, and BLM still has a lot of safety concerns with training levels of county volunteers and equipment dependability.

4.9b Recommendation: If no consideration is given to incorporating Lincoln County's open areas without fire protection or placement of a satellite station in the general vicinity, then a Mutual Aid Agreement may improve upon the existing situation of no fire protection.

Concerns over existing mutual aid agreements need to be addressed at the annual agreement update meeting. Each agency (BLM and FPD) need to air their concerns, agree upon a solution, and strive to overcome the weakness, and increase the effectiveness of the mutual aid agreements.

5.0 Public Education/Prevention

5.1 Education

- **5.1a Condition:** Throughout the needs analysis and public outreach process, it is evident that most citizens and private landowners in Lincoln County are very interested, and need further education in fire-wise home practices and wildfire prevention efforts.
- **5.1b Recommendation:** Community education efforts needs to be expanded into the urban areas. Prevention training should be implemented and orientated around FIREWISE A Community-wide Outreach Program (Appendix B).

5.2 Prevention

- **5.2a Condition**: Prevention efforts are limited throughout Lincoln County. Each FPD has on going prevention activities, with emphasis on urban populations only.
- **5.2b Recommendation:** Increase prevention efforts to include rural areas of the county. Prevention training should be implemented and orientated towards the benefits of creating and maintaining Defensible Space and Survivable Space around homes and structures. (Appendix B)

Develop and maintain evacuation plans for all subdivisions, farms, ranches, recreational areas and the cities in cooperation with disaster, emergency, and police personnel.

5.3 Code Enforcement

5.3a Condition: Lincoln County has adopted some NFPA building codes covering subdivision development, however the rural areas have homes and structures in many cases predate existing regulations. These parcels are not part of a legal subdivision and may have different regulations covering their future development.